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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,508	12/27/1999	KEIJO PALVIAINEN	PM265414	2423

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EXAMINER
DAVIS, TEMICA M

ART UNIT	PAPER NUMBER
2685	

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/446,508	Palvlanen
Examiner	**Art Unit**
Temica M. Davis	2685

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Oct 2, 2002*

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-14* is/are pending in the applica

4a) Of the above, claim(s) _____ is/are withdrawn from considera

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-14* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirem

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed October 2, 2002 have been fully considered but they are not persuasive.

Applicant argues that Joong fails to disclose a method or equipment for call forwarding via one of several alternative lines on the basis of subscriber data related to call forwarding, specifically, implementing call routing to a forwarding number by selecting one of several alternative lines based on a service code. Applicant further argues that Joong doesn't teach an HLR connected to a first exchange in a mobile system, wherein the HLR transmits a basic service code indicating necessary properties of the line which should be selected in routing a call.

Again, the examiner disagrees. As stated before, Joong discloses a system for providing service differentiation for call forwarding based upon the type of call wherein the calls are forwarded appropriately according to the type of service code the call has (abstract).

Joong discloses when in an incoming call is addressed to a called subscriber, a determination is made as to whether the called subscriber has implemented call forwarding. This is achieved by the MSC interrogating the HLR for a forwarding number (col. 5, lines 36-48). Joong discloses wherein an indication of the type of call (i.e. speech or data) is determined, and based on that determination a transfer to number request invoke message includes a service code identifying the type of call (col. 6, lines 21-33 and col. 7, lines 26-40). Joong also discloses

wherein there are several types of service codes which pertain to analog speech, digital speech, asynchronous data and G3 fax.

Joong also discloses an embodiment wherein a subscriber can select which service codes to use which would indicate to the system which type of calls the called party would accept. This selection would be based on which mode the called party's terminal is in at the time an incoming call request is made, and based on the service code given by the called subscriber, the HLR and MSC appropriately forward the call based on the service code selected by the called party (col. 9, line 30-col. 10, line 6).

Based on the above remarks, the rejections to claims 1-14 stand rejected solely in view of Joong.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> "A person shall be entitled to a patent unless --
>
> (e) the invention was described in:
>
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or,
>
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treat in the English language..

3. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Joong et al (Joong), U.S. Patent No 6,134,433.

Regarding claim 1, Joong discloses a method for implementing call forwarding in a mobile system comprising at least one forwarding exchange for carrying out call forwarding via one of several alternative lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59) on the basis of subscriber data related to the call forwarding and at least one subscriber database for storing the subscriber data related to the call forwarding, the method comprising the steps of receiving at the forwarding exchange a call set-up message addressed to a subscriber in the mobile system [col. 5: lines 36-47], performing a subscriber data request to the subscriber database [col. 5: lines 40-45], transmitting a response message from the subscriber database to the forwarding exchange, the message comprising data indicating the call forwarding, a forwarding number [col. 5: lines 45-56], and a basic service code [col. 6: lines 28-33], and implementing call routing to the forwarding number by selecting one of said alternative lines based on the basic service code [col. 6: lines 21-43, col. 8, lines 48-59].

Regarding claim 2, Joong discloses a method for implementing call forwarding in a mobile system comprising at least a first exchange for carrying out call forwarding via one of several alternative lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59) on the basis of subscriber data related to the call forwarding and at least one home location register connected to the first exchange for storing the subscriber data related to the call forwarding, the method comprising receiving at the first exchange a call set-up message addressed to a subscriber

in the mobile system, requesting routing information from the home location register to the first exchange, the message comprising data indicating the call forwarding, a forwarding number, and a basic service code indicating the basic service related to the call, and implementing call routing to the forwarding number by selecting one of said alternative lines based on the basic service code [col. 5: line 36 - col. 6: line 43, col. 8, lines 48-59].

Regarding claim 3, Joong discloses wherein the basic service code is forwarded from the home location register to the first exchange via an extension added to the response message Send_Routing_Info_RES to the routing information request [co. 6: lines 44-65].

Regarding claim 4, Joong discloses a method for implementing call forwarding in a mobile system comprising at least one exchange for carrying out call forwarding on the basis of subscriber data related to the call forwarding and at least one visitor location register for storing the subscriber data related to the call forwarding, the method comprising receiving at the exchange a call set-up message addressed to a subscriber in the mobile system, providing a subscriber data request to the visitor location register connected to the exchange, transmitting a response message from the visitor location register to the exchange, the message comprising data indicating the call forwarding, a forwarding number and a basic service code and implementing call routing to the forwarding number according to the basic service code [col. 5: line 36 - col. 6: line 65].

Regarding claim 5, Joong discloses a home location register connected to a first exchange in a mobile system, wherein the home location register is arranged to transmit a basic service

code to the first exchange in connection with a response message to a routing information request, the basic service code indicating the necessary properties of the line which should be selected in routing the call [col. 6: lines 10-43, col. 8, lines 48-59].

Regarding claim 6, Joong discloses wherein the home location register is arranged to forward the basic service code to the first exchange by means of an extension added to the response message Send_Routing_Info_RES to the routing information request [col. 6: lines 44-65].

Regarding claim 7, Joong discloses a first exchange in a mobile system, comprising means for transferring a call to a forwarding number via one of several alternative lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59) , wherein the exchange is arranged to derive a basic service code from the call set-up message or from a response message transmitted by the home location register to the first exchange in response to a subscriber data request, and the exchange is arranged to route the call to the forwarding number by selecting one of said alternative lines based on the basic service code [col. 5: line 36 - col. 6: line 65, col. 8, lines 48-59].

Regarding claim 8, Joong discloses wherein the exchange is arranged to receive the basic service code in an extension added to the response message Send_Routing_Info_RES to the routing information request [col. 6: lines 44-65].

Regarding claim 9, Joong discloses wherein the forwarding number is the number of a Voice Mail Service center having several lines, and that said exchange is arranged to transfer the

call to the Voice Mail Service center via a line selected for the transfer according to the basic service code [col. 4: lines 30-44].

Regarding claim 10, Joong discloses wherein the exchange is arranged to subject the forwarding number to a conversion selected according to the basic service code [col. 6: lines 21-43].

Regarding claim 11, Joong discloses an exchange in a mobile system, comprising means for transferring a call to a forwarding number via one of several alternative lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59), wherein the exchange is arranged to derive a basic service code from basic service data that indicates the basic service of the call and that is transmitted in connection with the call set-up message or a response message transmitted from the visitor location register to the exchange in response to a subscriber data request, and the exchange is arranged to perform routing to the forwarding number by selecting one of said alternative lines based on the basic service code [col. 5: line 36 - col. 6: line 65, col. 8, lines 48-59].

Regarding claim 12, Joong discloses wherein the exchange is arranged to derive the basic service code at least on the basis of the bearer capability information element contained in the basic service data [col. 6: line 21 -28].

Regarding claim 13, Joong discloses wherein the forwarding number is the number of a Voice Mail Service center having several lines, and that the exchange is arranged to transfer the

call to the Voice Mail Service center via a line selected for the transfer according to the basic service code [col. 4: lines 30-44].

Regarding claim 14, Joong discloses wherein the exchange is arranged to subject the forwarding number to a conversion selected according to the basis service code [col. 6: lines 21-43].

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Davis whose telephone number is (703) 306-5837. The examiner can normally be reached on Monday-Thursday from 8:30 am to 6:00 pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Edward Urban, can be reached on (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2600 customer service whose telephone number is (703)306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for any communications intended for entry).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Temica M. Davis

December 16, 2002

EDWARD F. URBAN
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